

REMARKS

The Applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated June 4, 2003. Claims 1,3 and 4 are pending in the application. Claims 1, 3 and 4 are rejected. Claim 5 is herein added.

Claim Rejections - 35 U.S.C. §103(a)

Claims 1 and 3-4 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,279,961 to Fujioka et al. in view of U.S. Patent No. 5,252,184 to Tanaka et al.

The Examiner asserts that Fujioka et al. discloses a recording material with a base sheet and an increased surface resistivity (column 3, line 68); cationic resins and a surface resistivity of 10^6 to 10^{10} ohms by dry weight (column 5 lines 33-44). Fujioka et al. does not explicitly disclose the dry adhering amount. The Examiner asserts that it would have been obvious to optimize the components because discovering the optimum or workable ranges involves only routine skill in the art.

The Examiner notes that Fujioka et al. does not disclose a cation equivalent measured by colloidal titration method. The Examiner notes that Tanaka et al. teaches a paper comprising a cation equivalent in the range of 1.0 to 15.0 meq/g. The Examiner concludes that it would have been obvious to include a cation equivalent of 3-8 meq/g in the recording material of Fujioka et al. because Tanaka et al. teaches this feature is known and is particularly excellent in the retention of fillers (column 5, lines 5-7).

Applicants disagree with the above rejection, and assert that not all of the claimed limitations are taught or suggested by the cited references.

Applicants first disagree with the Examiner's assertion that in claim 1, "...as measured by colloidal titration method" is a product by process limitation. Applicants note that the phrase "...as measured by colloidal titration method" is not a claimed production process but merely restrictive clause that specifies the method used to measure the cation equivalent recited in the claim. For example, it may be that a different method of measuring cation equivalent may produce a correspondingly difference result.

Applicants note that claim 1 requires a surface resistivity of 10^9 to 9.9×10^{13} ohms, using an amount of resin that is 0.5 to 2.0 g/m². With respect to Fujioka et al., Applicants note that this reference teaches paper having a surface resistivity of 10^6 to 10^{10} ohms, using an amount of resin that is 2 to 20 g/m², preferably 5 to 15 g/m². There is no suggestion to go outside this range. Moreover, while Fujioka et al. mentions a surface resistivity of 10^6 to 10^{10} ohms, all 18 of the Examples of Fujioka et al. are in the range of surface resistivity of 3.7×10^7 to 5×10^8 ohms; none of the Examples are in the presently claimed range. Therefore, Applicants assert that there is no teaching to utilize the presently claimed range.

Second, as noted above, the Examiner asserts that Tanaka et al. teaches a paper comprising a cation equivalent in the range of 1.0 to 15.0 meq/g, and concludes that it would have been obvious to include a cation equivalent of 3-8 meq/g in the recording material of Fujioka because Tanaka teaches this feature is excellent in the retention of fillers.

Applicants disagree with the Examiner's characterization of Tanaka et al. As described in the present specification, page 3, lines 5-18, the present invention uses a cationic resin to attain good water resistance, and as described on page 6, lines 4-12, in view of the balance of the water

U.S. Patent Application Serial No. 09/508,617

resistance and properties for electrophotographic recording, the dry adhering amount of the cationic resin is 0.5-2.0 g/m² and the cation equivalent of the cationic resin is 3-8 meq/g.

The Examiner asserts that Tanaka teaches paper comprising a cation equivalent of 1.0-15.0 meq/g. However, Applicants note that Tanaka et al. discloses use of not a cationic resin but an amphoteric polymeric electrolyte. A cationic resin is entirely different from an amphoteric polymeric electrolyte. Tanaka et al., column 1, line 64 to column 2, line 19, states that the amphoteric polymeric electrolyte possesses a cation electric value (Cv) of 1.0 - 15.0 meq/g and an anion equivalent value (Av) of 0.1 - 7.0 meq/g. Thus, as to the amphoteric polymeric electrolyte, both of the anion equivalent and cation equivalent should be simultaneously specified.

Moreover, Applicants note that Tanaka et al. relates to an additive for paper production, and is entirely silent on a paper for ink jet and electrophotographic recording. Thus, Tanaka et al. would not be referenced by one skilled in the art of paper for ink jet and electrophotographic recording.

Therefore, it is unreasonable to extract the cationic equivalent value from Tanaka et al. to combine it with Fujioka to reach the present invention.

For at least the above reasons, Applicants submit that the present invention patentably distinguishes over the cited references. Applicants request withdrawal of the rejections and passage of the claims to issue.

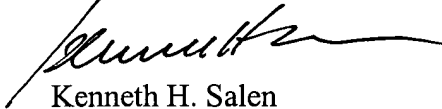
If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No. 09/508,617

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees that may be due with respect to this paper to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP



Kenneth H. Salen
Attorney for Applicants
Reg. No. 43,077

KHS/np
Atty. Docket No. 000225
Suite 1000, 1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930



23850

PATENT TRADEMARK OFFICE

Q:\FLOATERS\KHS\00\000225\000225 Amend 9-4-03.wpd